

REMARKS

Favorable reconsideration and withdrawal of the objections and rejection set forth in the above-mentioned Official Action in view of the foregoing amendments and the following remarks are respectfully requested.

Title

The title has been objected to as not being descriptive. In response, a new title, which is more clearly indicative of the claimed invention, is presented herein for the Examiner's consideration and approval.

Claims Status

Claims 44 through 54 remain pending in the application. Claims 44 through 50 and 52 have been amended to even more succinctly define the invention and/or to improve their form. It is respectfully submitted that no new matter has been added. Claims 44 and 48 are the only independent claims pending in the application.

Claim Objection

It is acknowledged with appreciation that Claims 50 through 52 are merely objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims. Claims 50 through 52 remain in their dependent form, inasmuch as it is believed that Claim 49 from which they depend will be found to be allowable.

Art Rejection

Claims 44 through 49, 53, and 54 are rejected under 35 U.S.C. § 103(a) as being unpatentable over DeSchamphelaere, et al. '762. The rationale underlying the rejection is succinctly set forth in the Official Action.

Response to Art Rejection

The rejection is respectfully traversed.

Amended independent Claim 44 calls for an image forming apparatus that includes an image bearing member on which a latent image corresponds to image information is formed; developing means for developing the latent image formed on the image bearing member with a developer including a carrier and a toner; supplying means for supplying the toner to the developing means; detecting means for detecting a magnetic permeability of the developer; counting means for counting pixel information corresponding to the image information; and selecting means for selecting between a first mode in which an amount of the toner supplied from the supplying means to the developing means is controlled on the basis of an output from the detecting means and a second mode in which the amount of the toner supplied from the supplying means to the developing means is controlled on the basis of an output from the counting means. The selecting means selects between the first mode and the second mode in accordance with a difference value between a value detected by said detecting means before a stop of an image forming operation and a value detected by the detecting means after a start of an image forming operation after the stop of the image forming operation.

Amended independent Claim 48 calls for an image forming apparatus including the image bearing member, developing means, supplying means, detection means, and counting means of amended Claim 44. In Claim 48, the selecting means selects between a first mode and a second mode in accordance with a difference value between a value detected by the detecting means before a stop of an image forming operation and a value detected by the detecting means after the stop of the image forming operation.

According to amended Claims 44 and 48, an apparatus performs a toner supplying control by using a result of a detected magnetic permeability of a developer. The invention is characterized by “selecting means for selecting between a first mode in which an amount of the toner supplied from said supplying means to said developing means is controlled on the basis of an output from said detecting means (for detecting a magnetic permeability of the developer) and a second mode in which the amount of the toner supplied from said supplying means to said developing means is controlled on the basis of an output from said counting means (for counting pixel information or on the basis of both of the outputs from the detecting means and the counting means). The selecting means selects between the first mode and the second mode in accordance with a difference value between a value detected by said detecting means before a stop of an image forming operation and a value detected by said detecting means after a start of an image forming operation after the stop of the image forming operation.” Thus, the toner supplying control can be performed with accuracy even if a bulk density of the developer varies during a stoppage of an image forming operation.

DeSchamphelaere, et al. ‘762 discloses changing a developer supply mode after a predetermined “running-in” period. The Examiner recognizes that DeSchamphelaere, et al. ‘762 does not disclose or suggest switching the developer supply modes depending on detected magnetic permeability function. Accordingly, the Examiner looks to DeSchamphelaere, et al. ‘762 for this feature.

In Fig. 3 of DeSchamphelaere, et al. ‘902 shows a change in a detected magnetic permeability of a developer during a running-in period on starting the use of a new developer.

Applicants submit that DeSchamphelaere, et al. '762 and DeSchamphelaere, et al. '902 do not address the problem solved by the invention, i.e., toner supplying control cannot be performed with accuracy due to a change in a bulk density of the developer during a stop of an image forming operation. Accordingly, DeSchamphelaere, et al. '762 and DeSchamphelaere, et al. '902 neither disclose nor suggest that the claimed selecting means, which effectively solves the foregoing problem.

It is also respectfully submitted that the combination rejection is not well founded. The Examiner has provided a *rationalization* for combining the teachings of the cited art based on the benefits of doing so. A combination rejection is proper only when there is some suggestion or motivation in the cited art *per se* to cause one having ordinary skill in the art to combine the teachings of the cited art. There is nothing in the cited art which supports the position that it can be combined in the manner suggested. Even if the art could be so combined, the mere fact that the art can be combined is not sufficient if there is no suggestions in the art that such a combination is desirable. For example, see ACS Hospital Systems, Inc. v. Montefiore Hospital, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984).

In view of the foregoing, it is respectfully submitted that independent Claim 48 is allowable over DeSchamphelaere, et al. '762 and DeSchamphelaere, et al. '902 whether taken individually or in combination.

Dependent Claims

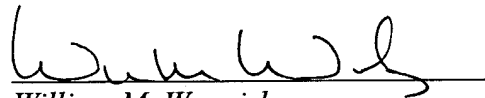
Claims 45 through 47 and 49 through 54 depend either directly or indirectly from one of Claims 44 and 48 and are allowable by virtue of their dependency and in their own right for further defining Applicants' invention. Individual consideration of the dependent claims is respectfully requested.

Closing Comments

It is respectfully submitted that the pending claims are allowable over the art of record and that the application is in condition for allowance. Favorable reconsideration and early passage to issue of the present application are earnestly solicited.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our New York office at the address shown below.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read 'Wannisky', is written over a horizontal line.

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